I claim:

1. A method for selecting an aptamer capable of binding to a target, said method comprising the steps of:

i) interacting an antisense oligonucleotide with a library oligonucleotide having a complementary antisense binding domain to form a double stranded duplex, said library oligonucleotide further having a random nucleotide domain;

ii) immobilizing the duplex structure on a solid support;

iii) incubating the duplex structure in the presence of the target; and

iv) collecting library oligonucleotides that dissociate from the duplex structure and bind to the target.

2. The method of claim 1, further comprising amplifying the library nucleotides collected at step iv) to provide an amplified population.

3. The method of claim 2 further comprising the step of sequencing clones derived from the amplified population.

4. A method for the selection of an aptamer specific for a target, said method comprising the steps of:

i) providing a library oligonucleotide, said library oligonucleotide comprising an antisense binding domain, at least one random sequence domain, a 3' primer binding domain and a 5' primer binding domain;

ii) hybridizing the library oligonucleotide to a biotinylated antisense oligonucleotide to form a duplex molecule;

iii) interacting the duplex molecule with avidin coated beads to immobilize the duplex molecule on the beads;

iv) incubating the beads with the target;

v) collecting oligonucleotides which have bound to the target; and

vi) amplifying the collected oligonucleotides.

5. An aptamer comprising a sequence selected from the group consisting of SEQ. ID. NO. 6, SEQ. ID. NO. 7, SEQ. ID. NO. 8, SEQ. ID. NO. 9, SEQ. ID. NO. 10, SEQ. ID. NO. 11, SEQ. ID. NO. 12, SEQ. ID. NO. 13, SEQ. ID. NO. 14, SEQ. ID. NO. 15, SEQ. ID. NO. 16, SEQ. ID. NO. 17, SEQ. ID. NO. 18, SEQ. ID. NO. 19, SEQ. ID. NO. 20, SEQ. ID. NO. 21, SEQ. ID. NO. 22, SEQ. ID. NO. 23, SEQ. ID. NO. 24, SEQ. ID. NO. 25 and SEQ. ID. NO. 26.

6. An aptamer capable of binding to ATP, said aptamer comprising a sequence selected from the group consisting of: SEQ. ID. NO. 6, SEQ. ID. NO. 7, SEQ. ID. NO. 8, SEQ. ID. NO. 9, SEQ. ID. NO. 10, SEQ. ID. NO. 11, SEQ. ID. NO. 12, SEQ. ID. NO. 13, SEQ. ID. NO. 14, SEQ. ID. NO. 20, SEQ. ID. NO. 21, SEQ. ID. NO. 22 and SEQ. ID. NO. 23.

7. An aptamer capable of binding to GTP, said aptamer comprising a sequence selected from the group consisting of: SEQ. ID. NO. 15, SEQ. ID. NO. 16, SEQ. ID. NO. 17, SEQ. ID. NO. 18, SEQ. ID. NO. 19, SEQ. ID. NO. 24, SEQ. ID. NO. 25 and SEQ. ID. NO. 26.

8. A signaling structure switching aptamer complex comprising a sequence selected from the group consisting of: SEQ. ID. NO. 6, SEQ. ID. NO. 7, SEQ. ID. NO. 8, SEQ. ID. NO. 9, SEQ. ID. NO. 10, SEQ. ID. NO. 11, SEQ. ID. NO. 12, SEQ. ID. NO. 13, SEQ. ID. NO. 14, SEQ. ID. NO. 15, SEQ. ID. NO. 16, SEQ. ID. NO. 17, SEQ. ID. NO. 18, SEQ. ID. NO. 19, SEQ. ID. NO. 20, SEQ. ID. NO. 21, SEQ. ID. NO. 22, SEQ. ID. NO. 23, SEQ. ID. NO. 24, SEQ. ID. NO. 25 and SEQ. ID. NO. 26.

9. An aptamer selection system comprising an antisense oligonucleotide and a library oligonucleotide, said library oligonucleotide comprising an antisense binding domain having a sequence complementary to the antisense oligonucleotide and at least one random nucleotide domain, wherein said antisense oligonucleotide is adapted to be attached to a solid support.

10. An aptamer selection system according to claim 9, wherein the library oligonucleotide further comprises a first primer binding domain at the 5' end and a second primer binding domain at the 3' end.

11. An aptamer selection system according to claim 10, further comprising a first primer capable of binding to the first primer binding domain and a second primer capable of binding to the second primer binding domain.

12. An aptamer selection system according to any one of claims 9 to 11, wherein the library oligonucleotide comprises two random domains flanking the antisense binding domain.

13. An aptamer selection system according to any one of claims 9 to 12, wherein the antisense oligonucleotide is biotinylated.

14. An aptamer selection system according to claim 13, further comprising avidin coated agarose beads.

15. An aptamer selection system comprising an antisense oligonucleotide comprising SEQ.ID. No. 1, a library oligonucleotide comprising SEQ.ID.NO. 2, a P1 oligonucleotide comprising SEQ.ID.NO.3, a P2 oligonucleotide comprising SEQ.ID.NO. 4 and a P3 oligonucleotide comprising SEQ.ID.NO.5.